Title 33 Code of Federal Regulations, Part 320-330.

3.5.4.1. Streams and Wetlands

Streams

Surface waters within the project study corridors were visited and evaluated to ascertain physical characteristics. All stream channel segments within the project study area were classified using the Cowardin classification system (Cowardin *et al.* 1979[32]) and the Natural Stream Channel Classification System (Rosgen 1996[31]).

All streams within the project study area are considered to be riverine systems. Riverine systems may be perennial or intermittent and are identified as those areas contained within a channel that are not dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and contain less than 0.5 parts per thousand (ppt) ocean-derived salts.

Prior to initiation of field efforts, available mapping of stream channel segments within the project study area was reviewed to estimate sinuosity. In the field, all stream channels were traversed to identify any significant changes in channel type. Estimations of channel width, bankfull depth, and flood-prone width were made at selected locations to verify channel type. These locations were selected because they were either representative of the stream as a whole or of a specific reach. Sinuosity was estimated in the field and compared to estimated sinuosity from the mapping. Slope was also estimated in the field.

To enable alternative analyses, the USACE designates streams as either important or unimportant. Streams that have perennial flow, associated wetlands, significant aquatic fauna, or associated threatened and endangered species are generally considered to be important, and impacts to these streams require mitigation. Intermittent streams may be considered important if the associated wetlands, significant aquatic fauna, or threatened and endangered species criteria are met. Streams designated as unimportant do not typically require mitigation. The USACE has determined that all of the stream channels within the project study area are important.